



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,256	12/27/2004	Hirokazu Ishikawa	042959	2957
38834	7590	04/11/2007	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			PETERSON, KENNETH E	
		ART UNIT		PAPER NUMBER
				3724
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	04/11/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,256	ISHIKAWA ET AL.	
	Examiner	Art Unit	
	Kenneth E. Peterson	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 March 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 3-9 is/are pending in the application.
 - 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-6 and 9 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

Art Unit: 3724

1. Claims 7 and 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 23 March 07.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, the scribe lines are parallel and intersect at right angles. This impossibility causes the claim to be indefinite.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohyama et al. (4,275,494) in view of Perragaux et al. (6,955,989).

As best seen in figure 8, Kohyama discloses a method of making liquid crystal displays by mechanically scoring a V-shaped groove (23) on a front surface and grinding a U-shaped groove (13) on a back surface.

As discussed on lines 55-57 of column 4, the U-shaped groove on the back surface is made by a mechanical grinding tool, not by etching. However, etching is a well known alternative, and Perragaux enlightens the reader about the merits of etching

U-shaped grooves in lieu of mechanical tools. See in particular lines 49-54, column 1 and lines 44-46 of column 2.

It would have been obvious to one of ordinary skill in the art to have replaced Kohyama's mechanical grinding step with an etching step, as taught by Perraux, in order to decrease the damage to the workpiece.

5. Claims 1,3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohyama et al. (4,275,494) in view of Perraux et al. (6,955,989), as discussed above, and further in view of Bosenberg (3,046,176).

In regards to claim 3, Kohyama's does not disclose whether his front surface scoring tool vibrates. Examiner takes Official Notice that it is old and well known to vibrate scoring tool. An example of this is the patent to Bosenberg, who discusses this alternative on lines 32-36 of column 1. It would have been obvious to one of ordinary skill in the art to have further modified Kohyama by making the blade vibrate, as is well known and taught by Bosenberg, in order to increase the scoring action.

In regards to Claim 4, Examiner has no choice but to ignore one of the mutually exclusive recitations. Kohyama teaches scoring parallel lines as seen in figure 6.

In regards to claim 5, Kohyama does not show scribe lines that are closed curves. However, the shape of a cut is an obvious design choice. If one wants a curved product, it is obvious to make a curved cut. Within Kohyama's field of endeavor (LCD manufacture), there are numerous products that are roughly circular, such as

Art Unit: 3724

watch faces. Accordingly, it would have been obvious for Kohyama to have scribe lines that are closed curves, in order to make curved products.

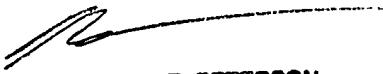
6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth E. Peterson whose telephone number is 571-272-4512. The examiner can normally be reached on Mon-Thur, 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kp



KENNETH E. PETERSON
PRIMARY EXAMINER